# **Highlights**

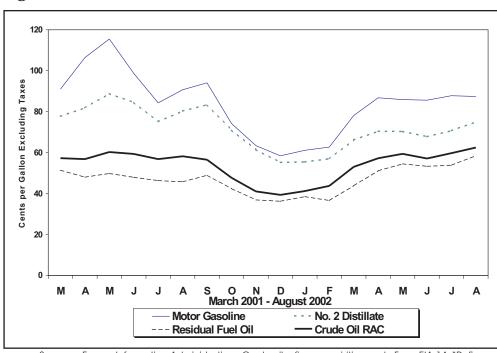
International crude oil prices rose in August. While rising concern about the possibility of war between the United States and Iraq both supported and contributed to the upward movement, fundamental market factors also played a salient role behind the increases. More specifically, issues related to global oil supply became more pronounced during August. Although members of the Organization of Petroleum Exporting Countries (OPEC) continued to exceed self-imposed production limits by 1.8 million barrels per day, a significant drop in exports from Iraq offset the overproduction by the group. In the past, oil exports from Iraq have made up approximately 5 percent of world crude oil supply. Both the Energy Information Administration (EIA) and the International Energy Agency (IEA) have stated that OPEC should raise output in the near future to prevent price spikes later this year. Statements from various OPEC officials over the course of the month sent conflicting messages to international oil markets. Sending prices higher at mid-month,

Kuwaiti's acting oil minister said the group could maintain its current production levels, and should vote to do so during the coming mid-September meeting in Osaka, Japan. Later in the month, Saudi Arabian officials said if necessary, their country would increase production and exports to modulate any sharp price increases which had a calming influence on late-August oil prices. Additionally, other OPEC representatives made supportive statements for prices to remain within the group's price target price range of \$22-\$28 per barrel.

With the exception of gasoline, prices for crude oil and refined products rose firmly in the United States during

August. Notably, as crude oil prices rose, driven higher by the so-called "war premium" and falling inventories, gasoline prices remained range bound contributing to refining margins falling to their lowest level since November 2001. Because of the thin margins between finished product prices and crude oil costs, several refiners announced run cuts. Additionally, there was speculation that scheduled refinery maintenance that typically takes place in early to mid-autumn would be higher than normal due to lean refining profit margins. At the end of the high-demand summer driving season, prices for gasoline held steady because of plentiful supplies throughout regional markets. Gasoline prices were also influenced by an anticipated increase in imports to East Coast markets at the beginning of September along with less stringent federal anti-pollution specifications for gasoline going into effect in mid-September. In contrast, distillate prices climbed, particularly in Midwestern markets

Figure HL1. Crude Oil and Petroleum Product Wholesale Prices



Sources: Energy Information Administration. Crude oil refiner acquisition cost: Form EIA-14, "Refiners' Monthly Cost Report"; petroleum product prices: Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report."

Table HL1. U.S. Refiner Prices and Volumes of Petroleum Products

(Prices: Cents per Gallon Excluding Taxes, Volumes: Million Gallons per Day)

Products	Sales to End Users						Sales for Resale					
	August 2002		July 2002		August 2001		August 2002		July 2002		August 2001	
	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume
Motor Gasoline	100.1	66.4	100.3	64.4	102.5	64.4	87.4	330.8	87.8	326.2	90.6	325.8
Conventional	96.7	39.5	97.4	38.3	98.8	38.3	83.9	224.2	84.6	221.8	87.7	219.1
Regular	93.6	30.0	94.4	29.2	95.9	29.3	82.2	184.4	82.9	182.9	86.3	180.5
Midgrade	103.2	5.2	103.6	5.0	104.8	5.0	88.6	12.8	89.1	12.6	91.4	12.6
Premium	111.2	4.3	111.6	4.1	112.7	4.0	93.5	27.1	94.2	26.3	96.1	26.0
Oxygenated	106.2	2.0	106.8	1.9	118.5	1.7	94.6	7.7	94.9	8.2	105.4	7.1
Regular	103.6	1.6	104.3	1.6	116.3	1.4	93.4	6.0	93.9	6.3	104.2	5.7
Midgrade	114.0	0.2	113.7	0.2	123.7	0.2	95.7	1.1	95.1	1.3	108.2	1.0
Premium	122.7	0.2	122.8	0.2	134.6	0.1	104.8	0.6	104.5	0.6	113.7	0.5
Reformulated	104.9	24.9	104.4	24.3	107.2	24.3	94.8	98.8	94.6	96.2	95.8	99.6
Regular	100.7	17.8	100.3	17.3	103.0	17.5	91.6	74.6	91.5	72.1	92.6	75.1
Midgrade	111.8	3.5	111.1	3.4	113.5	3.4	102.9	7.9	102.1	7.9	102.2	8.1
Premium	119.1	3.6	117.9	3.5	122.9	3.4	105.6	16.4	104.5	16.3	106.8	16.4
Aviation Gasoline	136.1	0.1	139.1	0.1	136.3	0.1	115.5	1.0	118.9	0.8	125.9	0.8
Kerosene-Type Jet Fuel	75.2	51.4	72.2	53.1	77.8	54.9	74.1	11.1	71.5	12.5	77.4	14.0
Propane (Consumer Grade)	41.5	1.7	38.4	2.2	46.3	3.9	41.5	28.1	37.5	25.1	45.3	30.7
Kerosene	79.7	0.1	80.6	0.1	84.2	0.3	77.0	1.3	73.2	1.1	81.3	1.5
No. 1 Distillate	85.1	0.2	82.5	0.2	92.0	0.2	84.9	0.3	78.4	0.2	93.9	0.4
No. 2 Distillate	78.6	22.3	75.0	21.5	84.4	26.2	75.0	124.0	70.7	120.8	80.3	127.7
No. 2 Fuel Oil	73.2	3.0	70.7	2.8	82.1	2.6	71.1	18.3	68.7	17.9	76.6	19.0
No. 2 Diesel Fuel	79.5	19.3	75.6	18.7	84.6	23.6	75.6	105.8	71.0	102.9	80.9	108.7
Low Sulfur	81.6	13.1	77.9	12.8	85.8	17.1	76.0	93.8	71.3	91.5	81.6	93.9
High Sulfur	74.8	6.1	70.7	5.9	81.7	6.5	72.7	12.0	68.7	11.4	77.0	14.8
No. 4 Fuel <sup>a</sup>	68.2	0.4	65.5	0.4	62.4	0.3	62.3	0.0	60.9	0.0	58.2	0.1
Residual Fuel Oil	61.3	10.5	58.6	9.3	51.0	13.6	58.5	9.1	53.8	8.8	45.7	9.5
Sulfur Content not > 1 %	67.4	2.8	63.9	2.4	59.7	3.5	60.6	5.2	55.8	5.4	50.4	4.6
Sulfur Content > 1 %	59.1	7.7	56.8	6.9	48.0	10.1	55.5	3.8	50.7	3.5	41.3	4.9

<sup>&</sup>lt;sup>a</sup> Includes No. 4 fuel oil and No. 4 diesel fuel.

Source. Energy Information Administration Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report."

where a seasonal increase in demand combined with tighter supplies spurred prices higher. Spot market prices reflect all of these trends. At New York Harbor, the August monthly average spot price for regular gasoline was 76.9 cents per gallon compared to 76.1 cents per gallon last month. Spot market prices in Chicago, the Gulf Coast, and Los Angeles show the similar patterns. Prices for No. 2 distillate fuels show wider month-to-month ranges. In Chicago, the monthly average spot prices for low-sulfur diesel fuel were 71.1 cents per gallon in July and 75.5 cents per gallon in August. At New York Harbor, the prices for No. 2 fuel oil were 67.9 cents per gallon last month and 70.1 cents per gallon in August.

Additional August market and sales activity for crude oil and the principal petroleum products are summarized in the following sections.

# **Crude Oil**

Falling stock levels and concern about war with Iraq acted as the primary factors behind the steady rise in the daily spot price for West Texas Intermediate (WTI) crude oil at Cushing, Oklahoma in August. After opening at \$27.02 per barrel, the prices slipped to the month's low immediately, falling to \$26.51 per barrel. The price rose steadily during the following weeks, driven, among other factors, by fears of imminent war

Notes: Motor gasoline averages and totals prior to October 1993 include leaded gasoline.

Notes: Values shown for the current month are preliminary. Values shown for previous months are revised. Data are final upon publication in the *Petroleum Marketing Annual*.

with Iraq and falling stock levels. It reached its high of \$30.37 per barrel on August 21. After that point, the price dropped through the end of August, closing the month at \$28.97 per barrel.

- Monthly average prices for crude oil rose again in August. The average domestic crude oil first purchase price increased \$1.25 (5.3 percent), to \$24.76 per barrel.
- The average free-on-board (f.o.b.) cost of imported crude oil rose 72.0 cents (3.0 percent), to \$24.41 per barrel. The average landed cost of foreign crude oil rose 77.0 cents (3.1 percent), to \$25.69 per barrel.
- The average refiner acquisition cost for domestic crude oil climbed \$1.50 (5.9 percent), to \$26.87 per barrel. The average cost of imported crude oil to U.S. refiners rose 94.0 cents (3.8 percent), to \$25.76 per barrel. The composite refiner acquisition cost for crude oil increased \$1.18 (4.7 percent), to \$26.24 per barrel.

# **Petroleum Products**

## **Motor Gasoline**

With inventories at comfortable levels across regional markets, the daily spot price for regular gasoline at New York Harbor showed little variation during August. Opening at 78.5 cents per gallon, the price moved to its low of 75.0 cents per gallon on August 8 following the release of stocks reports indicating a rise in gasoline supply levels. The price reached its high, 79.1 cents on August 26, spurred by expectations of a drop in inventories prior to the long Labor Day weekend. The price closed the month at 77.3 cents per gallon, about a penny below it where it began August.

• National average gasoline prices for August registered only slight changes from July levels. The average price for retail sales of motor gasoline by refiners slipped 0.2 cent to \$1.001 per gallon. The average wholesale price fell 0.4 cent to 87.4 cents per gallon. Including data reported by a sample of motor gasoline marketers, the national average price at company-operated retail outlets dropped 0.1 cent to 99.3 cents per gallon. The average wholesale price declined 0.3 cent to 87.2 cents per gallon. The average dealer tank wagon (DTW) price increased 0.3 cent to 93.3 cents per gallon, while the average rack price

declined 0.5 cent to 86.0 cents per gallon. The average price for bulk sales rose 0.4 cent to 77.3 cents per gallon. Reformulated gasoline (RFG) prices were 7.4 cents higher than conventional gasoline prices at retail, and 9.0 cents higher at wholesale. Oxygenated gasoline prices were 10.3 cents more than conventional gasoline prices at retail, and 10.0 cents higher at wholesale.

• Sales of gasoline by refiners climbed in August. Total sales rose 6.6 million gallons per day (1.7 percent), to an average of 397.2 million gallons per day. Retail sales increased 2.0 million gallons per day (3.1 percent), while wholesales rose 4.6 million gallons per day (1.4 percent). Rack sales made up 64.5 percent of wholesales, while DTW and bulk sales made up 20.1 percent and 15.4 percent, respectively. Reformulated gasoline made up 31.1 percent of total motor gasoline sales, while oxygenated gasoline accounted for 2.4 percent of sales.

#### No. 2 Distillate

In contrast to the torpidity seen during the past several months, the daily spot price for No. 2 heating oil at New York Harbor increased appreciably during August. Opening at 67.0 cents per gallon, the price dropped to the monthly low of 64.4 cents per gallon on August 5. The price rose firmly during the next several weeks as reports showed rising demand and decreasing stock levels. Closing the month at 74.9 cents per gallon, its highest level, the price was 7.9 cents high than where it began August.

- No. 2 distillate prices increased in all categories during August. The national average residential sales price for No. 2 distillate increased 1.0 cent to \$1.039 per gallon. The average wholesale price climbed 4.2 cents to 75.6 cents per gallon. The average price for No. 2 diesel fuel at company-operated retail outlets rose 3.1 cents, while the average No. 2 diesel fuel wholesale price increased 4.6 cents. The difference between low- and high-sulfur diesel fuel prices was 2.0 cents at retail and 2.8 cents at wholesale.
- Refiner sales of No. 2 distillate rose in August. Total sales rose 4.1 million gallons (2.9 percent), to 146.4 million gallons per day. Sales of No. 2 fuel oil increased 600,000 gallons per day (2.9 percent), while sales of No. 2 diesel fuel climbed 3.5 million gallons per day (2.9 percent). Low-sulfur diesel fuel accounted for 85.5 percent of all refiner diesel fuel sales, and 73.0 percent of all refiner No. 2 distillate sales.

#### Residual Fuel Oil

- August residual fuel oil prices rose from July levels. Refiner prices for low-sulfur residual fuel oil rose 3.5 cents to 67.4 cents per gallon at retail, and 4.8 cents to 60.6 cents per gallon at wholesale. The average retail price for high-sulfur residual fuel oil increased 2.3 cents to 59.1 cents per gallon, while the wholesale price rose 4.8 cents to 55.5 cents per gallon. Including data reported by a sample of residual fuel oil marketers, the average low-sulfur residual fuel oil price inched up 0.7 cent to 62.2 cents per gallon at retail, while the wholesale price increased 4.8 cents to 60.2 cents per gallon. The retail price for high-sulfur residual fuel oil rose 2.7 cents to 58.7 cents per gallon, while the wholesale price increased 2.0 cents to 53.7 cents per gallon.
- Refiner sales of residual fuel oil climbed in August. Total sales increased 1.5 million gallons per day (8.3 percent) to 19.6 million gallons per day. Low-sulfur residual fuel sales rose 200,000 gallons (2.6 percent),

while high-sulfur residual fuel oil sales increased 1.1 million gallons (10.6 percent).

## **Other Products**

- Prices for products included in this section generally rose in August. Refiner propane prices climbed 3.1 cents per gallon at retail, and 4.0 cents per gallon at wholesale. Including data from a sample of propane marketers, the average residential propane price fell 5.3 cents per gallon, while the average retail price increased 0.8 cent. The average wholesale price rose 3.8 cents. Prices for kerosene-type jet fuel, No. 1 distillate, and No. 4 distillate increased at both levels, while aviation gasoline prices did just the opposite. Kerosene prices declined at retail but rose at wholesale.
- Sales of these products by refiners rose for the most part during August. Sales of aviation gasoline, kerosene, and No. 4 distillate increased both levels, while kerosene-type jet fuel declined at both the retail and wholesale levels. Propane and No. 1 distillate sales fell at retail but increased at wholesale.